

ABSTRACT

An assembly for providing a concentrated, vertically stacked array of laser beams from a horizontally offset array of electrically serially-connected metallic microchannel heat sinks each bearing a laser diode bar. The heat sinks are mounted on horizontally offset planes of the manifold which has coolant channels serving adjacent heat sinks that are separated from each to increase the electrical resistance of the fluid path between adjacent ones of said heat sinks. Stepped optical deflectors re-arrange the horizontally emitted laser beams into vertical stack.